CHAPTER NINETEEN
INTERNATIONAL ARMAMENTS COOPERATION PROGRAMS

Introduction

By now, the context of U.S. security assistance programs should be familiar. However, there are programs other than foreign military sales (FMS) and international military education and training (IMET) with which security assistance managers and officers, both in the continental U.S. and overseas, should become familiar as they are a significant part of the overall U.S. national security effort. These other programs have been known by various names, such as Defense Industrial Cooperation (DIC), Defense Cooperation in Armaments (DCA), International Cooperative Programs (ICP), or the current term, International Armaments Cooperation Programs (IACP). All of these programs represent opportunities for armaments and logistics cooperation at various weapons systems development levels with allies and friends of the U.S.

In some respects, these programs differ little from security assistance programs; and in fact many often include FMS or direct commercial sales (DCS) as a supplement or as an integral part of the program, e.g., co-production or licensed production. On the other hand, IACP differ from traditional security assistance in matters of funding, oversight responsibility, and legal authority. They often bear little or no resemblance to security assistance, yet their end objective is the same, that of enhanced mutual security.

This chapter will describe the background and history of such programs, the objectives, how they work, key players and organizations in Department of Defense (DoD). It will address international agreements, the forms of collaboration with successful examples, the seven major programs, the overseas environment, security assistance office (SAO) responsibilities, and lessons learned about how to conduct IACP. Much of the content of this chapter is extracted directly from the Director, International Cooperation *International Armaments Cooperation Handbook*, Third Edition, November 2004 available at: http://www.acq.osd.mil/ic/.

Legislative Authority

While certain aspects of IACP, e.g., co-production arrangements, have been in existence since World War II, serious attempts at cooperation in the field of armaments development did not begin in earnest until the 1970s. Taking into account the lack of standardization and interoperability with North Atlantic Treaty Organization (NATO) partners and recognizing the developed defense industrial bases of many of U.S. allies, steps were undertaken by Congress providing DoD authorities and in certain cases funding to promote Rationalization, Standardization and Interoperability (RSI) with U.S. allies and later other friendly countries. These

measures range from specific enabling and restricting legislation to detailed procedures of reviews and approvals, and are intended to encourage armaments cooperation while ensuring that such cooperation is entered into only with the proper legal and regulatory authority.

Over the years, Congress has enacted a number of laws encouraging and enabling cooperation with U.S. allies in the acquisition of defense equipment. Most are codified in Title 10 United States Code (U.S.C.) – *Armed Forces*, and Title 22 – *Foreign Relations and Intercourse*. These laws often permit departures, when appropriate and justified, from domestic procurement law that would otherwise make cooperation impossible. Acquisition workforce awareness of these legislative provisions is essential, both to recognize the opportunities and to ensure that legal authorities are not exceeded. Each international cooperation functional area has one or more statutes that form the legal basis for DoD international armaments cooperation activities in that area. In many instances, additional U.S. government (USG) regulations and DoD/DoD component policies have been issued to implement these legal requirements and establish specific procedural guidance that must be followed by DoD acquisition personnel.

The complexity of laws, regulations, and policies that apply to armaments cooperation activities should not be underestimated. Self-interpretation of armaments cooperation related laws, regulations, and policies without assistance from DoD international program organizations is unwise and, in the case of legal interpretations, unauthorized. Legal interpretations of relevant armaments cooperation statutes must be obtained from appropriate OSD or DoD component legal counsel. In most cases acquisition personnel should consult with the Director, International Cooperation [DIR(IC)] or DoD component international program organizations to obtain assistance, including detailed guidance, regarding one or more specific international program activities under consideration.

The most important point to remember about the legal basis for armaments cooperation activities is that international program related statutes and associated regulations and policies in most instances apply in addition to, not instead of, applicable domestic DoD acquisition laws and policies. Acquisition personnel, with the assistance of supporting DoD international programs organizations, must comply with both domestic and international cooperation related laws, regulations, and policies while developing and implementing armaments cooperation initiatives.

Objectives

The core objectives of armaments cooperation are:

- Operational - to increase military effectiveness through interoperability with allies and coalition partners,
- Economic - to reduce weapons acquisition cost by sharing costs or avoiding duplication of development efforts with our allies and friends,
- Technical - to access the best defense technology and help minimize the capabilities gap with allies and coalition partners,

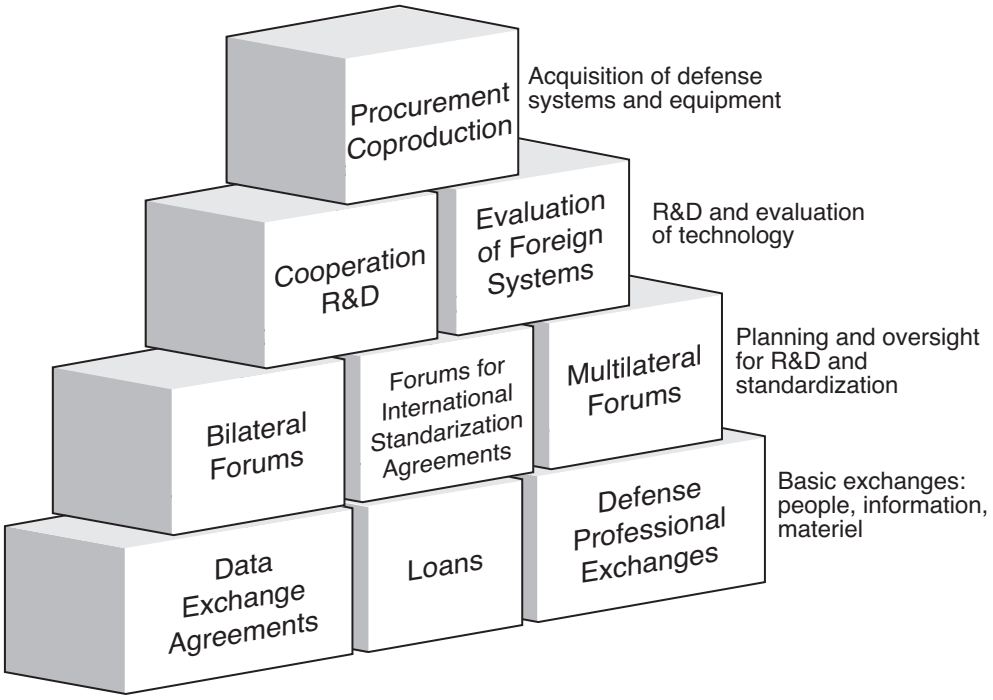
- Political – strengthen alliances and relationships with other friendly countries, and
- Industrial – bolster domestic and allied defense industrial bases.

Since the end of the Cold War, the U.S. recognized that armaments cooperation programs offered new and broader opportunities for promoting U.S. security. These new opportunities include new subject areas, such as the environment, and new partners worldwide. As emphasized in the DoD 5000 series directives, the leveraging of U.S. resources through cost sharing and economies of scale afforded by international cooperative research, development, production, and logistics support programs should be fully considered when DoD components work with users to define needed capabilities as well as during the preparation of the technology development strategy and subsequent acquisition strategy.

Armaments cooperation activities result from political and military relationships that have evolved over time, and are generally conducted with nations that have solid political and economic ties with the U.S., similar military requirements, and a reasonably robust defense science and technology base. Selected allies have common objectives and possess defense industrial capabilities that have allowed cooperation across a wide spectrum of programmatic and technical areas. The convergence of interests is reflected in the numerous information and personnel exchanges and cooperative development projects with these countries. Other countries may be quite important to the U.S. from a political, economic, or military standpoint but have divergent military requirements or lack a substantial defense industrial base, diminishing the potential for successful international armaments cooperation activity.

Another way of looking at the cooperative armaments relationship is to think of the hierarchy of relationships as a pyramid as illustrated in Figure 19-1. Even though armaments cooperation programs form the capstone, it does not imply that cooperative research, development and acquisition (RD&A) is the ultimate form of cooperation. It does, however, illustrate that effective armaments cooperation normally rests on a broad foundation of other prerequisite relationships and conditions.

Figure 19-1
Building Blocks of International Armaments Cooperation



Armaments Cooperation Policy

DoD policy promotes international cooperative acquisition, technology and logistics activities, especially with allies and friends that will enable the warfighter to be well prepared and supported for coalition operations. Well-constructed international cooperative arrangements and programs strengthen our defense industrial base by providing reciprocal access to defense markets with our allies and friends.

Accordingly, the Under Secretary of Defense for Acquisition, Technology and Logistics [USD(AT&L)] strongly encourages international cooperative activities that pursue standardization or interoperability of equipment and services to be used by the armed forces of the United States and coalition partners, provide access to technology from sources worldwide, and save money. The USD(AT&L) has aligned international cooperation goals under five of the seven AT&L goals. The international aspect of each follows:

- Prioritize and harmonize capabilities based requirements with allies and friendly governments.
- Ensure interoperable, logistically supportable systems.
- Identify and acquire the best technologies from sources worldwide
- Remove barriers to international defense cooperation and trade with our allies and friends.

- Ensure that there is adequate staff to enable international cooperation, and improve international acquisition training for U.S. and allied workforces.

DoD has strongly supported international armaments cooperation as a key aspect of the DoD acquisition process. DoDD 5000.1, which provides management principles and mandatory policies and procedures for managing all acquisition programs, states that Program Managers shall pursue international armaments cooperation to the maximum extent feasible, consistent with sound business practice and with the overall political, economic, technological, and national security goals of the United States. Furthermore, interoperability between U.S. forces and coalition partners is defense acquisition policy. This Directive goes on to say that a cooperative development program with one or more allied nations is preferred to a new, joint, DoD component or agency development program, or DoD component-unique development program.

Key International Armaments Cooperation Program Players

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology and Logistics

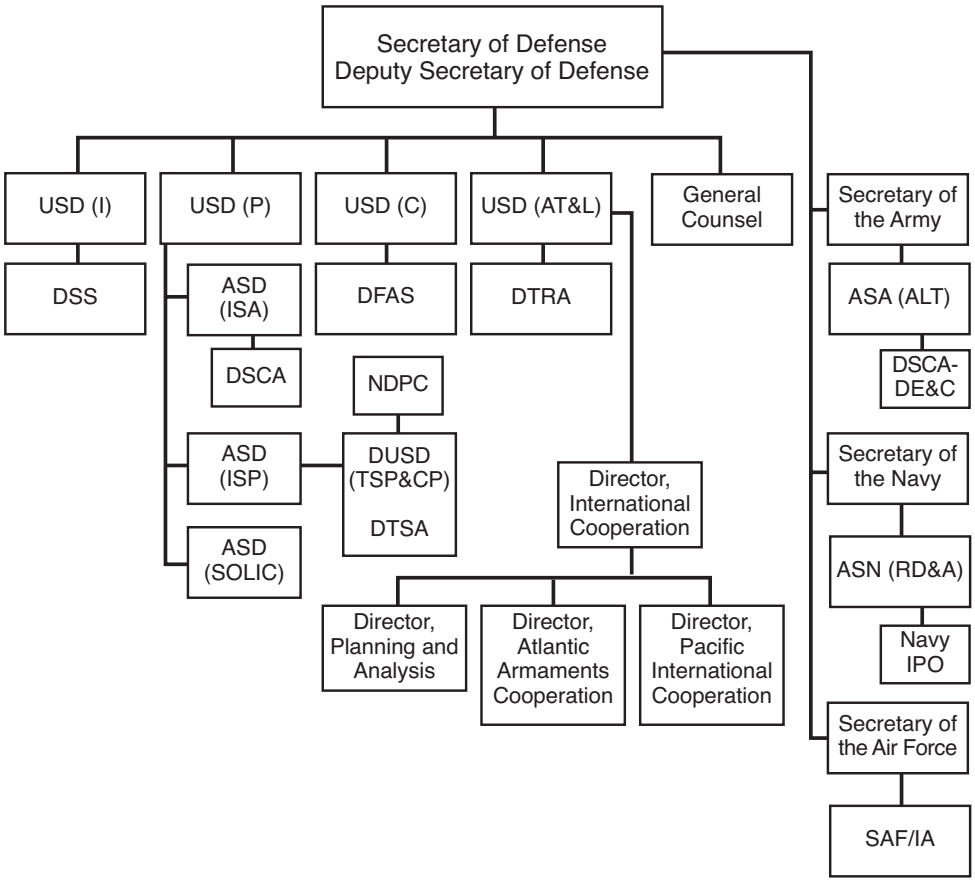
The Under Secretary of Defense for Acquisition, Technology and Logistics [USD(AT&L)] is the Principal Staff Assistant and advisor to the Secretary and Deputy Secretary of Defense for all matters relating to the DoD Acquisition System, research and development, advanced technology, developmental test and evaluation, production, logistics, installation management, military construction, procurement, environmental security, and nuclear, chemical, and biological matters. The USD(AT&L) is responsible for international cooperative research, development, test and evaluation, production, and logistics support, including wartime host-nation support, with allied and friendly foreign nations. The USD(AT&L) develops, in coordination with the Under Secretary of Defense for Policy [USD(P)], and the DoD General Counsel, agreements with friendly and allied nations and international organizations relating to acquisition matters consistent with DoDD 5530.3. The USD(AT&L) is also the U.S. National Armaments Director (NAD) and as such is the U.S. delegate to the NATO Conference of National Armaments Directors (CNAD).

Director, International Cooperation

The Director, International Cooperation advises the USD(AT&L), and establishes policy for international armaments cooperation programs. The Office of International Cooperation has three directorates: two regional with one each for the Pacific and Atlantic regions plus one for planning and analysis.

Figure 19-2

Department of Defense International Programs Organization



Director, Defense Research and Engineering

The Director, Defense Research and Engineering (DDR&E) is the principal staff advisor to the USD(AT&L) for research and engineering matters. Research and Engineering (R&E) includes Science and Technology programs consisting of Basic Research, Applied Research, and Advanced Technology Development) and Advanced Component Development and Prototypes programs. Responsibility for OSD-level assessments of international Science and Technology program initiatives proposed by DoD components falls under this office.

Deputy Under Secretary of Defense (Advanced Systems and Concepts)

The Deputy Under Secretary of Defense (Advanced Systems and Concepts [DUSD(AS&C)] is responsible for management of DoD's Advanced Concept Technology Demonstration (ACTD) program and associated international ACTD initiatives, as well as oversight and management of the Foreign Comparative Testing (FCT) Program.

Deputy Under Secretary of Defense (Laboratories and Basic Sciences)

The Deputy Under Secretary of Defense (Laboratories and Basic Sciences) [DUSD(LABS)] is responsible for basic research, including international technology.

Director, Defense Procurement & Acquisition Policy

The Director, Defense Procurement and Acquisition Policy (DP&AP) has primary responsibility for development, negotiation, and implementation of DoD reciprocal procurement agreements, as well as review of any other international agreement that involves contracting or procurement. Defense reciprocal procurement agreements in general waive *Buy American Act* restrictions for those nations that agree to reciprocate by waiving their national restrictions on foreign sources for defense products.

Deputy Under Secretary of Defense (Industrial Policy)

The Deputy Under Secretary of Defense (Industrial Policy) [DUSD(IP)] is responsible for the review of international agreements for their effect on the defense industrial base. The Office of the DUSD(IP) ensures that an adequate defense industrial base exists and remains viable for defense production to meet current, future, and emergency requirements. The office also advises USD(AT&L) on defense industry mergers, acquisitions and consolidation. This includes global investment in U.S. defense firms and other related globalization topics. The office also counsels Defense Acquisition Boards (DABs) on industrial base and production readiness issues.

General Counsel, Department of Defense (GC, DoD)

The General Counsel, Department of Defense (GC, DoD) is the chief legal officer of the DoD and provides advice to the Secretary and Deputy Secretary of Defense regarding all legal matters and services performed within, or involving, the DoD. The GC, OSD also provides legal advice to Office of the Secretary of Defense (OSD) organizations and, as appropriate, other DoD components. Specific to international matters, the GC, DoD acts as lead counsel for the Department in all international negotiations conducted by the OSD components and coordinates on all proposed international agreements prior to their tender to prospective parties by the OSD components, prior to the initiation of negotiations, and prior to final conclusion of proposed international agreements; oversees legal reviews performed by the DoD components with respect to the negotiation and conclusion of international agreements in accordance with DoDD 5530.3. The GC, DoD maintains the central repository for all international agreements coordinated, negotiated, or concluded by DoD personnel. Furthermore, the GC, DoD provides for guidance in, and coordination of, significant legal issues in international law.

Under Secretary of Defense (Comptroller)

The Under Secretary of Defense (Comptroller) [USD(C)] reviews proposed agreements to ensure that they comply with DoD 7000.14-R, *DoD Financial Management Regulation (FMR)* and other DoD financial guidance.

Under Secretary of Defense for Policy

The Under Secretary of Defense for Policy [USD(P)] is the principal staff assistant and advisor to the Secretary and Deputy Secretary of Defense for all matters concerning the formation of national security and defense policy, as well as the integration and oversight of DoD policy and plans to achieve national security

objectives. In the matters of international armament cooperation, USD(P) reviews international agreements for policy considerations in dealing with foreign countries.

Military Departments and Defense Agencies

Each of the military departments (MILDEPs) and defense agencies has established an infrastructure to support the armaments cooperation program. Figure 19-2 illustrates these organizations, and the following section provides a brief description of their individual responsibilities.

U.S. Army

The Deputy Assistant Secretary of the Army for Defense Exports and Cooperation (SAAL-ZN) is responsible for Army armaments cooperative RD&A programs. The office with day-to-day responsibility is the Director of Armaments Cooperation (SAAL-NC). SAAL-NC directly supports SAAL-ZN in reviewing and coordinating international agreements.

Specific activities include management of Army Foreign Comparative Testing (FCT) projects, review and coordination of international agreements and Information Exchange Program annexes, personnel assignments and exchanges, cooperative logistics, support for the NATO Army Armaments Group (NAAG) panels, and tracking, reporting and financial management for armaments cooperation programs. SAAL-ZN conducts Senior National Representative (SNR) discussions for the Army and is also the Army's head of delegation to the NATO Army Armaments Group (NAAG).

Army Overseas Offices

US Army International Technology Centers (ITCs) are maintained in Argentina, Australia, Canada, Chile, France, Germany, Japan, Singapore and the United Kingdom. These centers forge and expand links with both the government (defense and non-defense) and non-government sectors. The goal of these links is to promote force multiplying interoperability and standardization with allies and coalition partners. To achieve this goal, the ITCs seek to identify and facilitate international cooperation that supports technology, acquisition and logistics activities.

In addition, representatives in Canada, Australia and Britain have an expanded mission as the Standardization representative for the American, British, Canadian, and Australian (ABCA) Armies Standardization Program.

The Army Research Office under the U.S. Army Research, Development and Engineering Command's Army Research Laboratory maintains two overseas components:

- The European Research Office (ERO) operationally attached to ITC-Atlantic in London, and
- The Asian Research Office (ARO) operationally attached to ITC-Asia in Tokyo.

These research offices enhance, complement, and provide risk mitigation for Army and DoD science and technology (S&T) programs. To do this, these offices

leverage foreign expertise and technology, and build and nurture S&T partnerships. They also identify and leverage opportunities for specific collaborations between U.S. DoD and foreign researchers in Europe, Africa, Asia, Middle East, and Southwest Asia (including India). They have the capability to provide limited funding for collaborative opportunities, to include support for expert travel, conferences and workshops, and S&T projects.

U.S. Navy

The Assistant Secretary of the Navy for Research, Development and Acquisition, ASN(RD&A), has responsibility for all international RD&A program functions, including international armaments cooperation efforts. ASN(RD&A) has delegated responsibility for management and implementation of all RD&A international functions, including foreign military sales and technology transfer, to the Navy International Programs Office (Navy IPO). Within the Navy IPO, the Directorate of Technology Security and Cooperative Programs is responsible for all international armaments cooperation activities, including cooperative R&D, production and support agreements, the RDT&E Information Exchange Program, Engineer and Scientist Exchange Program (ESEP), and Navy FCT projects. The U.S. Navy's Oceanographer (N096) is both the SNR and acts as the Navy's NATO Naval Armaments Group (NNAG) Representative, with the support of Navy IPO.

Navy Overseas Offices

The Office of Naval Research maintains R&D liaison offices in the United Kingdom responsible for covering Europe, in Japan covering Asia, and in Chile covering South America. These foreign field offices survey worldwide findings, trends and achievements in science and technology and establish and maintain liaison between the Navy and foreign organizations that conduct programs of Naval interest. Liaison includes international, bilateral, and multilateral cooperative R&D programs, evaluation of foreign weapons, and scientific and technical exchange programs.

U.S. Air Force

Within the Air Force, all non-operational international programs are the responsibility of the Deputy Under Secretary of the Air Force for International Affairs (SAF/IA). While its primary focus is oversight of FMS and security assistance programs, SAF/IA also oversees international cooperative RD&A programs. The Air Force SNR is from SAF/IA, although the NATO Air Force Armaments Group (NAFAG) Representative is from the Assistant Secretary of the Air Force for Acquisition (SAF/AQ).

The Air Force Armaments Cooperation Division (SAF/IAPQ) directly supports SAF/IA in performing its international armaments cooperation responsibilities, including cooperative R&D, production and logistics agreements, management of Air Force FCT projects, as well as support for the NATO Reseach and Technology Organization (RTO) and Air SNR meetings and programs.

Air Force Overseas Offices

The European Office of Aerospace Research and Development (EOARD) is based in London and is an extension of the Air Force Office of Scientific Research. It is the

USAF's monitor of Europe and Africa with respect to basic and applied aerospace-related technology. The technical staff maintains close contact with USAF laboratories to provide continuing assessments of technology and to recommend technical areas for potential cooperative research. EOARD can sponsor research by European institutions through grants or contracts.

The Asian Office of Aerospace Research and Development (AOARD), located in Tokyo, was established in 1992 by the Air Force Office of Scientific Research. Its function is similar to that of EOARD, except it concentrates on Pacific Rim nations. The Office of Naval Research Asian Office and the Army Research Office – Far East are co-located with the AOARD in Tokyo.

Air Force R&D Liaison Offices (RDLO) are liaison offices maintained in Germany, France, and the United Kingdom. These offices serve as liaisons between the USAF R&D personnel and their foreign counterparts.

Defense Agencies

Defense agencies have responsibility and authority similar to the MILDEPs for the conduct of international armaments cooperation efforts related to their mission. However, not all defense agencies have dedicated international organizational elements to assist in conducting international armaments cooperation activities.

Several overseas organizations act as liaison between the DoD research, development and acquisition agencies and corresponding agencies in the host nation. They can assist technical project offices and U.S. international program offices in obtaining information and assessing the opportunities for cooperative projects with their host nation.

Offices of Defense Cooperation

The most important of these overseas organizations are the Offices of the Defense Cooperation/Security Assistance Offices (ODCs/SAOs) in many U.S. embassies. The ODC/SAO is generally responsible for overseeing and implementing in-country security cooperation, including both FMS activities and facilitating cooperation in research, development, and acquisition. DoD has approximately 40 dedicated armaments cooperation personnel in the ODCs/SAOs located in the allied nations listed in Table 19-1. In nations where there is no ODC/SAO, the OSD armaments cooperation point of contact is usually the Defense Attaché.

Armaments cooperation personnel assigned to the ODCs are the in-country liaison for the National Armaments Director and the DoD Components, and directly support the U.S. weapons acquisition process. They are also the in-country agent for enforcement of Reciprocal Defense Procurement Memoranda of Understanding. General oversight and guidance for armaments cooperation activities are provided by DIR(IC). A specific function of ODCs/SAOs is to assist DoD RD&A agencies to obtain information on host nation equipment and programs needed to make acquisition decisions regarding development, production, and logistics cooperation with the host nation.

Table 19-1
Countries with Armaments Cooperation Personnel Assigned

Australia	France	Italy	Singapore
BELLUX	Germany	Japan	South Korea
Canada	Greece	Netherlands	Spain
Chile	Hungary	Norway	Sweden
Czech Republic	India	Poland	Turkey
Denmark	Israel	Romania	Ukraine
			United Kingdom

Once a cooperative opportunity becomes a prospective cooperative program, the ODC/SAO role continues through the in-country support and assistance rendered to the program. While the type and level of support will obviously vary by program, the common and most critical element is maintaining the two-way street of information flow and minimizing misunderstandings. In terms of communication, the ODC/SAO is literally on the front line. When things go wrong, they are usually the ones to receive the first complaint because they are accessible to all levels of the host nation Ministry/Department of Defense. However, because of that accessibility, they are also in the best position to learn of new program developments.

Other Embassy Personnel

In addition to the ODC, U.S. embassies have other offices which may have a role to play in cooperative programs. Normally, the ODC is primarily responsible for IACP activities with the host country. Other offices usually provide advice and support. The following is a list of offices found in many embassies which may have interests in and information concerning various aspects of IACP:

- **Science Officer.** Works for the State Department and can provide information on the scientific and technological capabilities of the country.
- **Commercial Officer.** Works for the Foreign Commercial Service (FCS) representing the Department of Commerce. The Commercial Officer can provide valuable assistance in defense trade matters and information about host country trade/industry associations.
- **Economics Officer.** Works for the State Department and may be able to provide additional information about country capabilities. The Economic Officer also can normally provide information about the country's budget.
- **Political or Political/Military Officer.** Works for the State Department and is normally consulted on policy issues.

• **Defense Attaché.** Works for the Defense Intelligence Agency (DIA) and may be able to provide additional information about the host country's military establishment.

International Agreements

An essential element of any international cooperative program is the formal agreement between cooperating nations that delineates respective responsibilities. The DoD has a highly structured process governing development, coordination, negotiation, and implementation of armaments cooperation related international agreements (IAs), also known as memoranda of understanding (MOUs) or memoranda of agreement (MOAs). The cooperative program international agreement shall, in accordance with DoDD 5530.3, *International Agreements,* specify the relationship and respective responsibilities of the DoD and the participating nation(s).

IAs are used to establish information and personnel exchanges, loans of equipment, cooperative research, development, test and evaluation projects, cooperative and coproduction including licensed coproduction, cooperative or reciprocal logistics support, and related standardization efforts. IAs document the agreement between the U.S. and one or more foreign partners when a commitment of resources, including funds, equipment, labor, information or action, is required. The simplest IA may commit to the loan of a test article. The most complex could be a multi-billion dollar agreement such as the Joint Strike Fighter (JSF) program.

International Agreements - General

Any international agreement between the U.S. and another nation constitutes a commitment binding in international law on the part of the U.S. and the foreign government. Such agreements obligate both governments to provide funds or other resources, or to perform certain activities. The clearly defined IA authorization and approval process ensures that the U.S. does not commit to a course of action that may not be in its best interest.

DoDD 5530.3, *International Agreements,* is the principal directive that governs the armaments cooperation international agreements process. The definition of an international agreement contains important aspects. It can be concluded by any DoD component, or in certain situations by the Department of State, with a foreign government or international organization. The U.S. insists that any international agreement must signify the intention of its parties to be bound in international law. While DoDD 5530.3 lists many possible denominations for an international agreement, the most common are memorandum of understanding or memorandum of agreement. The following seven documents are explicitly not considered to constitute international agreements for purposes of DoDD 5530.3.

- Contracts made under the *Federal Acquisition Regulations*.
- Foreign Military Sales Credit Agreements.

- Foreign Military Sales Letters of Offer and Acceptance (LOAs) and Letters of Intent (LOIs).
- Standardization Agreements (STANAGs, ABCA Standards, ASCC Air Standards, NAVSTAGs). However, STANAGs that provide for mutual support or cross-servicing are considered international agreements.
- Leases.
- Agreements solely to establish administrative procedures.
- Acquisitions or orders pursuant to cross-servicing agreements made under the authority of the *NATO Mutual Support Act*.

Unless a proposed agreement fits one of the exemptions, DoD acquisition personnel should consider any proposed cooperative program document potentially to be an IA requiring DoD 5530.3 processing.

Various legal authorities are the statutory basis for development, negotiation, and implementation of armaments cooperation IAs. DoDD 5530.3, and the *Defense Acquisition Guidebook*, and associated Deputy Secretary of Defense (DEPSECDEF) and DIR(IC) policy memoranda govern the processing of armaments cooperation IAs. Establishment of the proposed IA's legal basis is a critical element in the IA development and coordination process and should be accomplished in close coordination with the MILDEP's international programs organization and associated general counsel's office.

DoDD 5000.1 provides additional policy that international agreements for international armaments cooperation programs shall complete the interagency consultation and congressional notification requirement contained in 10 U.S.C. 2350a, Section 2751 22 U.S.C. 2751 [Section 1, *Arms Export Control Act (AECA)*], and 10 U.S.C. 2531.

Consultation with the Department of State

The *Case Act* [1 U.S.C. 112(b)] requires executive agencies to consult with the Secretary of State before signing an international agreement, as well as to provide copies of all IAs after they have been concluded. Not every agreement requires consultation; for example, those that fall under a specific class of agreement that the Department of State already has approved do not. If required, it is the responsibility of OSD to coordinate with Department of State during the DoDD 5530.3 specified review and approval of a proposed IA.

Consultation with the Department of Commerce

The Department of Defense is required to consider the effects of any agreement on the U.S. industrial base, and to consult with the Department of Commerce about the commercial implications and potential effects on the international competitive position of U.S. industry according to 10 U.S.C. 2531.

Forms of International Cooperation/Collaboration

As more and more government-to-government agreements are entered into, direct cooperation or collaboration between U.S. and foreign defense companies has been growing U.S. firms have entered into many different kinds of cooperation with their counterparts overseas both through Direct Commercial Sales (DCS) and Foreign Military Sales (FMS). Some are initiated by defense firms and others are the result of a government-led initiative. The following summarizes the different forms of armaments cooperation or collaboration between companies in the U.S. and its allies.

- **Collaboration.** The international coproduction or co-development of a weapon system
- **Consortium/Consortia.** A formal but ad hoc industrial arrangement to co-develop or coproduce a single weapon system. Successful consortia include McDonnell Douglas and British Aerospace (BAE) on developing and producing the AV-8B Harrier II; the five-nation F-16 coproduction (U.S., Belgium, Denmark, the Netherlands, and Norway); the Franco-Italian OTOMAT anti-ship missile; and Franco-Dutch-Belgian Tripartite Minesweeper. Yet, consortia traditionally experienced a relatively high failure rate, according to the Defense Budget Project Database (of over 600 major IACP activities), almost 1/5 of consortia collapse prior to the manufacturing phase.
- **Cooperative Research and Development.** A program where the U.S. DoD and a foreign defense ministry by written agreement jointly manage a research and development (R&D) effort. An excellent demonstration was a ducted rocket engine for a medium surface-to-air missile, which will increase the envelope against aircraft cruise missiles and tactical ballistic missiles.
- **Coproduction Assembly.** FMS with jointly shared production and/or assembly of a weapon system originally developed in one country. The F-16 fighter is a good example in which the countries, in addition to assembling the plane for their own air forces, also produced components and parts that were used in F-16s identified for U.S. Air Force.
- **Family of Weapons.** A division of labor among the participating governments involving several related weapon systems. The participating countries separately develop a particular weapon within the group and then permit the other participants to produce that weapon for themselves. Used by NATO. Used successfully by Britain and France during the late1960s with the family of utility helicopters called Lynx/Puma/Gazelle. Also was used in 1978 for the NATO ASRAAM/AMRAAM program, which turned out to be a collaboration nightmare by the late 1980s, according to a 1993 Defense Budget Project Study.
- **Government-led Initiative.** Globalization projects or activities initiated by government entities.

- **Industry-led Initiative.** Globalization projects or activities initiated by defense firms.
- **Joint Venture.** An international company jointly-owned and operated by defense firms in two or more countries in order to co-develop or coproduce a particular weapon or class of weapons. Examples include Eurocopter JV between Aerospatiale and Deutsche Aerospace that combined their helicopter production operations; and Euromissile between the same two companies, which manufactures the Roland, Milan, and HOT missiles.
- **Licensed Production.** The transnational sale of the rights to manufacture a weapon system originally developed within the supplier country. Examples include the Honeywell-Mitsubishi Heavy Industries (Japan) MK46 MOD 5 Torpedo; and the McDonnell Douglas F-15J Eagle Fighter in Japan.
- **Mergers and Acquisitions.** The purchase of shares in a defense firm by a defense company in another country.. Most of the defense-related mergers and acquisitions have occurred since 1986. An example is Deutsche Aerospace (DASA) purchase of a controlling interest in Fokker.
- **Strategic Alliances.** A flexible, strategic industrial arrangement, with long-term goals, between defense firms in two or more countries to study or plan future possible eco-production or co-development, or other types of informal or formal collaboration. Significant numbers of these were agreed to in mid-1980s. A recent example is General Dynamics and BAE (U.K.) to explore cooperation on armored vehicles.
- **Teaming.** Collaboration on a specific program as prime or subcontractor to include also multi-program teaming.

International Armaments Cooperation Programs

At present, there are six areas of cooperation, which are normally included under the label of international armaments cooperation programs (IACP). These include Information Exchange Program, Defense Personnel Exchange Program, Foreign Comparative Testing Program, International Cooperative Research and Development & Acquisition Programs, Defense Trade, and Cooperative Logistics.

Information Exchange Program

Since the 1950s, DoD Components have collaborated with the defense components of allied and friendly nations to exchange scientific and technical (S&T) information in areas of mutual interest. Such information exchange is the least complex of formal armaments cooperation activities.

While S&T information can be exchanged between the U.S. and a foreign nation using a case-by-case release, such exchanges are cumbersome and may lack adequate legal protection for the information exchanged, particularly in the area of intellectual property rights. These releases of information must undergo a case-by-

case review and approval by the cognizant foreign disclosure and international programs organizations (IPO), among others.

The Defense Research, Development, Test and Evaluation (RDT&E) Information Exchange Program (IEP), customarily called the IEP, is the prime means for and is commonly but improperly used to describe the sum of all DoD RDT&E information exchange taking place under bilateral and multilateral international agreements (IAs). Under this program, the U.S. and allied or friendly nations conduct RDT&E information exchange through IEP annexes to IEP agreements. These IEP agreements were formerly called Master Information Exchange Agreements (MIEA), Master Data Exchange Agreements (MDEAs), or Master Agreements.

Legal Authority

The Department of Defense relies upon the general authority of the Department and the DoD Components to conduct research and development (R&D) activities contained in 10 U.S.C. 2358 as the legal basis for establishment of IEP agreements and associated annexes.

Principles and Objectives

The benefit of the IEP information is:

- To see different ways of approaching a similar technical challenge possibly as a result of different engineering cultures.
- To identify and/or reveal technical approaches that either do or do not provide good results, and to avoid the cost of duplicating RDT&E.
- To expand the RDT&E information base.
- To promote cooperative R&D through the exchange of RDT&E information.
- To establish and/or nurture relationships between the technical communities of the US government and the technical communities of other nations for future acquisitions and promoting broader defense relationships.
- To be aware of developments outside the U.S. in defense and defense-related.
- To learn what other nations are developing for acquisition and broader defense planning activities.

Information Exchange Program Agreements

The U.S. participates in the IEP through bilateral and multilateral IEP agreements with allied and friendly nations. An IEP agreement is the IA between the DoD or DoD component and foreign governmental entities that establishes a framework for the exchange of RDT&E information. It does not establish information exchange details; instead, it authorizes creation of separate annexes for specific information exchange projects. The IEP agreement establishes the basic terms and conditions that IEP annex authorities, and IEP annex establishments must comply with when implementing an annex.

For example, the IEP agreement will specify security procedures, the highest classification allowed for the information exchanges, IEP management structure,

information use rights including Third Party Transfer, the process for clearance of visitors, and methods for resolving disputes. Consequently, DoD components do not include such terms and conditions when they develop and conclude individual IEP annexes; they need only to define the technical scope and determine the highest classification of the information to be exchanged for each annex.

Information Exchange Program Annexes

IEP agreements use IEP annexes to establish defined information exchange relationships between the Department of Defense and foreign governmental entities in specific RDT&E subject areas. Annexes are the best information exchange mechanism because they provide adequate legal protection for the information while facilitating the exchange of the information. Even though IEP annexes information exchanges require foreign disclosure certification, they simplify and accelerate the exchange process by authorizing field-level scientists and engineers to serve as Technical Project Officer (TPO). TPOs have the authority to manage information exchanges within the scope of the annex. As noted above, the implementation and approval of individual annexes has been delegated to the MILDEPs. There is no limit to the number of IEP annexes that an IEP agreement may have.

Each DoD component maintains records of its IEP annexes, and reports the number of its annexes annually to USD(AT&L)/DIR, IC. Annexes are considered DoD resources and their cross coordination and potential use by other DoD components is encouraged.

IEP participants must always remember, however, that annexes are mechanisms specifically limited to exchange of RDT&E information. They may not be used to transfer the following: material, equipment, technical data packages, production information, manufacturing information, price and availability information on U.S. production and/or operational systems, and funding.

Furthermore annexes are not the appropriate vehicle to:

- Establish personnel exchanges.
- Provide or exchange technical services.
- Perform cooperative RDT&E, which formally commits the participants to fund specific RDT&E shared work.
- Be cited as authority to place contracts.
- Exchange proprietary information unless explicit permission has been obtained from the owner and appropriate foreign disclosure and export control mechanisms are observed.
- Approve export licenses.
- Initiate Foreign Military Sales (FMS) activities.
- Exchange operational data.
- Exchange intelligence data.
- Provide training.

- Assume responsibility for performing any tasks or work on behalf of the other partner.

The above activities must be arranged through appropriate IAs, licenses, FMS cases, or contracts, and must be in compliance with applicable U.S. laws and policies, the *Security Assistance Management Manual (SAMM)*, the *Federal Acquisition Regulation (FAR),* and the *Defense FAR Supplement (DFARS).*

Implementation

The IEP will identify the establishments, i.e., the installations, agencies, laboratories, etc., that have an interest in and/or will provide the information authorized under the IEP. The IEP will also designate the authorities, i.e., the agencies or individuals through which the information will pass under the IEP. At a minimum, the list of authorities must include the SAO or defense attaché, the DoD component OPR, and the Technical Project Officer (TPO). Correspondence initiated by the U.S. under the IEP must be forwarded by the DoD component OPR if classified, or the TPO if unclassified. The TPO must be familiar with the formal channels of correspondence and procedures for processing requests for visits between the countries.

The TPO should provide the DoD component OPR with an annual progress report on the major exchanges and benefits derived under the IEP. This enables the DoD component OPR to evaluate the IEP's usefulness and effectiveness, and to determine whether action to amend or terminate the IEP is necessary. The DoD component OPR keeps the Director, International Cooperation advised of overall IEP activity.

Defense Personnel Exchange Program

The DoD has entered into a number of agreements with allies and friendly foreign countries which allow for the exchange or assignment of foreign personnel in U.S. defense establishments and for the corresponding exchange or assignment of U.S. personnel in foreign defense establishments. Most of these programs permit participants, both military and civilian, to spend one or more years working in the host nation's defense research and development organizations, joint program offices, or operational defense establishments on projects directly related to their area of expertise. Programs that facilitate the exchange of both U.S. and foreign participants are collectively referred to as the Defense Personnel Exchange Programs (DPEP).

The DPEP encompasses a number of different military and civilian exchange programs that involve the assignment of foreign nationals to positions with the DoD components in exchange for the assignment of DoD personnel to positions with foreign government defense establishments.

Participants in DPEP exchanges become an integral part of their host organizations, fully contributing to the project to which they are assigned. While participants learn a great deal and generally become more capable in their fields as a result of the experience, they are not sent to the host party or organization for training. Rather, participants both contribute to and learn from host country counterparts as they work

together in defense efforts of mutual interest to both nations. It should be noted that because allied and friendly foreign countries use their DPEP experience as a career-enhancing program, foreign DPEP participants often rise to positions of influence and importance in their own defense organization. These career progressions may result in long-lasting benefits to the U.S., since these individuals form friendships with rising U.S. personnel during assignments.

Legal Authority

The legal basis for all DoD personnel exchange and assignment programs is found in Section 1082, *Agreements for Exchange of Defense Personnel between the United States and Foreign Countries*, P.L.104-201. This section provides authority to the Secretary of Defense to negotiate agreements with allies or other friendly foreign countries to exchange military and civilian DoD personnel with military and civilian personnel of foreign defense ministries. Under this authority, DoD personnel may also be assigned to positions in private industries that support the host party of the host foreign government, but the law does not allow foreign personnel to be placed in U.S. defense industries. DoDD 5230.20 and DoDD 5530.3 establish the policy and procedures that apply to the development, negotiation, signature and implementation of individual defense personnel exchange and assignment IAs with foreign partners.

Goals and Limitations

While each DPEP IA is specific to the particular country with which the U.S. wishes to exchange personnel, certain overall guidelines apply to all DPEP exchanges. Successful DPEP assignments normally meet the following criteria:

- The experience and expertise to be gained by the participants should expand and/or enhance their careers.
- The professional development opportunities for participant(s) should be essentially equal.
- Assignments should be in disciplines associated with a mutual military requirement.
- Exchanges are managed in such a way that equitable benefits (qualitative and/or quantitative) are derived by both countries.

Certain conditions and restrictions apply to all DPEP exchanges:

- DPEP is not a means to provide training, nor is it to be used as a mechanism for exchanging technical data or other information related to the design, development, and manufacture of military systems.
- Participants may not act in the dual capacity as a DPEP participant and as a representative of their government while assigned to a host organization.
- Participants are prohibited from taking an oath of allegiance to the host country or holding an official capacity.

- The costs of participation are borne by the participant's parent organization. Exceptions exist for the cost of temporary duty directed by the host organization, certain training programs, and use of facilities of the host party.
- A U.S. delegation of disclosure authority letter (DDL), and position description is established for each exchange position assigned to a DoD component.
- Participants remain under the administrative control, i.e., pay, ratings, of their parent organization, but are under the operational control of their host organization.

DPEP Programs

Administrative and Professional Exchange Program

The Administrative and Professional Exchange Program (APEP) is a professional development program that promotes international cooperation by exchanging civilian and military specialist personnel in fields such as administration, logistics, finance, legal, planning and quality assurance. These reciprocal assignments take place through the exchange of military and/or civilian management professionals. APEP provides on-site working assignments for foreign personnel in U.S. defense establishments, and for U.S. personnel in foreign defense government and contractor establishments.

Engineer and Scientist Exchange Program

The Engineer and Scientist Exchange Program (ESEP) is a career enhancement program that assigns foreign civilian and military engineers and scientists to DoD government research, development, test, and evaluation (RDT&E) facilities and U.S. civilian and military engineers and scientists to foreign defense government and contractor RDT&E facilities.

The first bilateral ESEP agreement was established in 1963, when the U.S. and Germany agreed to place research scientists and engineers in each other’s RDT&E facilities. Historically, the ESEP program's objectives have been to improve the understanding of the other nation's technical capabilities and the process by which its defense RDT&E program is managed. Thousands of exchange foreign and U.S. scientists and engineers have participated in this program.

ESEP is the most widely utilized of the exchange and assignment programs. Currently, Germany provides the most participants in the ESEP by a wide margin. Following Germany, South Korea, the United Kingdom and Australia provide the most participants in the order listed. Historically, the number of foreign participants in ESEP greatly exceeds the number of U.S. participants.

Military Personnel Exchange Program

The Military Personnel Exchange Program (MPEP) involves the reciprocal, usually one-for-one, assignment of U.S. and foreign military personnel to authorized positions within the other country's operational military establishment. The goal of the program is to foster mutual understanding between the military establishment of each participating nation by providing exchange personnel familiarity with the organization, administration, and operations of the host organization. Foreign

military personnel are integrated into the DoD component host organization work force and vice versa for U.S. military personnel assigned to foreign partner military establishments. The intention of the MPEP is to exchange Commissioned and Non-Commissioned Officers in operational billets. There are a few exchanges that take place in RDT&E billets, e.g., developmental test pilots, but this is the exception, not the rule.

Defense Intelligence Personnel Exchange Program

The Defense Intelligence Personnel Exchange Program (DIPEP) is a program for exchanges of military intelligence analysts between the parent parties' intelligence organizations. DIPEP agreements are negotiated and implemented by the intelligence community.

Cooperative Program/Project Personnel

Cooperative Program/Project Personnel (CPP) are participants in a professional assignment program that promotes cooperative Research, Development and Acquisition (RD&A) work by assigning U.S. and foreign personnel with specific skills to on-sight positions in a joint program office (JPO). CPP assignments take place under specific cooperative RD&A MOUs that call for the establishment of a JPO where a multinational staff manages and/or executes the work under the agreement. CPP participants report to and take direction from the program manager (or an equivalent), and may serve in a variety of JPO positions ranging from deputy program manager to scientist. CPP personnel perform duties of an assigned position description (PD) under the direction of a JPO supervisor. CPP personnel are assigned specific project responsibilities and promote specific cooperative development, cooperative production and/or other activities under the agreement. However, CPPs cannot perform duties that are reserved by law or regulation to an officer or employee of the host party or organization such as the responsibilities of any contracting official, component duty officer, classified document custodian, security officer, escort duty etc., or perform other official acts as a representative of the host party or organization.

Note, that as a general rule, a CPP, assigned to a JPO in the U.S. is not permitted to act in a dual capacity as an official or employee of the JPO and as a foreign liaison officer for his/her government See DoDD 5320.20, *Visits, Assignments, and Exchanges of Foreign Nationals*, 12 August 1998, for additional information. However, there may be exceptional circumstances where the interests of the U.S. government, the project, and the foreign government would be best served by permitting an individual to serve both as a CPP and a liaison officer.

Foreign Liaison Officers

The purpose of the Foreign Liaison Officer (FLO) program is to facilitate cooperation, mutual understanding and information exchange regarding concepts or capabilities development, training, doctrine, RD&A, operations etc, between the defense establishments of the U.S. and our allies and coalition partners. A FLO is a foreign government military member or civilian employee who is authorized by his or her parent party/organization, and is certified by a DoD component host organization, to

act as an official representative of the parent party or organization in its dealings with the host organization in connection with programs, projects or agreements of interest to the parent parties/organizations. Reciprocity is not required for the establishment of FLO positions. FLOs are expected to represent the views to their parent parties or organizations regarding issues of mutual interest. Although not covered in great detail in this chapter, the DoD components also assign U.S. operational liaison officers in allied and friendly nation host organizations.

Implementation

The DPEP program is implemented through separate DPEP master IAs with each participating foreign partner. DPEP agreements normally cover the type(s) of exchange position(s) to be established, length of tour, financial responsibilities, use of facilities, entitlements, liabilities and claims, status of assigned personnel including privileges and exemptions, security, and administrative and oversight responsibilities.

APEP and ESEP IAs are usually negotiated and concluded by an OSD-delegated MILDEP executive agent (EA). The DUSD (Technology Security Policy and Counter Proliferation) [DUSD(TSP&CP)] [formerly the DUSD (Policy Support)] is the APEP EA and the USD(AT&L) is the ESEP EA. They delegate APEP and ESEP EA responsibility to a MILDEP at the commencement of the IA's Request for Authority to Develop and Negotiate (RAD) MOU process. During the RAD and Request for Final Approval (RFA), the MILDEP develops, coordinates, negotiates and concludes the IA. The MILDEP then implements the assigned APEP or ESEP IA.

OSD has delegated the responsibility for the oversight of the APEP and ESEP to the Army and Air Force by designating them executive agents (EAs). OSD divides up EA responsibilities, more or less equitably, between the Army and Air Force. The Army and Air Force EAs ensure that each DoD component that participates in the APEP or ESEP designates a managing agent (MA). Although only one MILDEP acts as EA for each APEP and ESEP agreement, personnel from all DoD components are eligible to participate in the exchanges.

Both APEP and ESEP IAs allow flexibility in the number and location of exchange personnel. MPEP agreements, on the other hand, are negotiated by each MILDEP for specific one-for-one exchange positions, and, as a result, have less flexibility in location and number of personnel participating.

U.S. DPEP Participation

U.S. participants in APEP and ESEP are usually selected competitively from volunteers who meet the selection criteria. Military participants are typically Army and Air Force captains or Navy lieutenants (O-3). Civilian participants are typically GS-12s or 13s, or equivalent. Selection is not necessarily based on specialty, so DoD personnel interested in APEP and ESEP exchange opportunities are encouraged to discuss potential assignments with their DoD component international programs organization.

The CPP is open to both foreign and U.S. participants, but is dependent upon the country in which the JPO is located. U.S. participants to be placed in the foreign JPO

are nominated by the U.S. program manager and approved in accordance with the governing IAs management structure.

The FLO program provides for U.S. participation; however, no DoD component centrally manages its total liaison officer program due to the diversity, depth and breadth of possible operational liaison officer placements. The participation in and placement of individual U.S. operational liaison officers is not uniformly regulated by the DoD components. It is recommended that before any DoD component takes steps to place a U.S. liaison officer that they consult with their component international programs organization.

If required, selected candidates must attend a DoD language course before being allowed to go overseas. Whenever possible, spouses also take the course. U.S. participants are expected to take their families to the host nation and live on the local civilian economy, even if there are opportunities to live in U.S. military housing. All participants are expected to be an integral part of the host organization, but they cannot serve in any other official capacity.

Foreign DPEP Participation

The first step in the assignment cycle is the parent party or organization screening and selection process. This process is strictly a function of the parent party, and each applies its own criteria. APEP, CPP, ESEP and Liaison Officer IAs contain requirements specifying that participants must be government employees, and ESEP IAs further specify that participants must have at least a bachelors degree, preferably a masters, in a scientific or engineering discipline. Not only must the foreign APEP, CPP, ESEP or FLO participant be technically qualified, there also must be a corresponding DoD host organization that is willing to accept the proposed candidate.

The foreign parent organization must also agree to pay the participant's salary, housing and travel expenses for the assignment. The U.S. will generally only be responsible for direct costs associated with hosting the individual at the U.S. host organization. Once the foreign parent party decides to nominate individual they will forward the individual's resume for to the appropriate DoD component MA. If the foreign partner is unclear where to send their candidate's resume, they should consult with a DoD component international programs organization or USD(AT&L)/DIR, IC.

When a U.S. host organization, e.g., center, laboratory, institute, program office etc., agrees to accept a foreign participant, the facility prepares a position description, which would describe the project the candidate would work on and outlining the candidate's responsibilities and duties. The facility is also responsible for obtaining foreign disclosure guidance regarding the candidate's assignment from the cognizant foreign disclosure organization. Such disclosure guidance must be obtained before the DoD component's MA or international programs organization initiates an attempt to arrange the proposed assignment with the parent organization's representatives.

Foreign Comparative Testing

The Foreign Comparative Testing (FCT) Program funds U.S. test and evaluation (T&E) of defense items developed by allied and other friendly foreign countries to determine whether these items can satisfy DoD requirements or address mission area shortcomings. Congress authorized the FCT Program in 1989 by consolidating two earlier programs: the Foreign Weapons Evaluation (FWE) Program and NATO Comparative Test (NCT) Program.

The FCT Program is administered by the DUSD, Advanced Systems and Concepts (AS&C), under the Director, Defense Research & Engineering, USD (AT&L)/DDRE. The key objectives of FCT are to:

- Improve warfighting capability,
- Accelerate fielding, and
- Save taxpayer funds.

Legal Authority

The legal basis for the FCT Program is 10 U.S.C. 2350a(g), *Side-by-Side Testing.* Participation in FCT is open to all foreign countries friendly to the United States. According to the statute:

> It is the sense of Congress that the Secretary of Defense should test conventional defense equipment, munitions, and technologies manufactured and developed by countries referred to in subsection (a)(2) to determine the ability of such equipment, munitions, and technologies to satisfy United States military requirements or to correct operational deficiencies; and that while the testing of non-developmental items and items in the late state of the development process are preferred, the testing of equipment, munitions, and technologies may be conducted to determine procurement alternatives.

10 U.S.C. 2350a(a)(2) explicitly refers to the following as eligible countries and organizations to participate in the FCT Program, to include:

- The North Atlantic Treaty Organization
- A NATO organization
- A member nation of the North Atlantic Treaty Organization
- A major non-NATO ally
- Any other friendly foreign country.

Funding

The annual authorization and appropriations Acts establish the level of DoD-wide FCT funding available in a given year. Funding is provided under Program Element (PE) 0605130D in the Defense-wide Research, Development, Test and Evaluation Budget.

Proposal Process

Each March, the military services and the Special Operations Command propose projects to OSD for FCT funding consideration. Each proposed project is submitted in a structured FCT proposal format. The proposal is a comprehensive explanation of an FCT project that clearly describes the candidate item for which funding is requested, cost and schedule data for the T&E, and additional information needed by OSD to evaluate the merit of the project. The OSD staff screens and evaluates proposals to ensure submitting components have:

- Strong user advocacy for the proposed item,
- Addressed valid requirements,
- Completed thorough market investigations, and
- Developed viable, funded acquisition strategies.

When the review is complete, OSD notifies Congress of the intent to obligate funds for the selected projects. After funding is provided, the sponsoring organizations obtain, test, and evaluate item(s) for the selected projects.

The highest priority for FCT funding is for T&E of equipment, in production or in the late stages of development, which demonstrates good potential to satisfy component requirements with little or no modification and which the sponsor intends to procure after successful tests. The FCT Program is not allowed to fund T&E of U.S. equipment nor purchase U.S. equipment for testing.

The following are criteria in evaluating FCT proposals.

- Item is foreign
- User advocates project
- Valid requirement exists
- Market investigation is recent, thorough and complete
- Procurement potential and viable acquisition strategy exist
- System is from a dependable ally and dependable company
- System and project has a U.S. partnership supporting bi-lateral cooperation
- Funds are available to test domestic contenders (if applicable)
- Item is in use by host nation (desired)
- Test cost/schedule is realistic
- Vendor participates in FCT proposal and test
- Logistics issues are addressed
- Certification and issues affecting procurement decision is addressed
- Project benefits U.S. (cost/schedule/performance)

Reporting

DoD component reporting requirements include a quarterly progress report, a quarterly financial summary, test plan, test report, final disposition report, and procurement report. In addition, components may be requested to present a project review for selected projects. OSD reporting requirements include notification to Congress of all new start projects and an annual report to Congress.

Since 1980, OSD has funded 449 FCT projects, and 393 projects have been completed to date. Of the 221 evaluations that met the sponsor's requirements, 133 led to procurements worth approximately $5.8 billion in FY 2002 dollars. With an OSD investment of about $805 million, the FCT Program has realized an estimated RDT&E cost avoidance of $4.0 billion.

Current FCT policy guidance, specific procedures and points of contact may be obtained from the FCT website at: http://www.acq.osd.mil/cto

International Cooperative Research, Development & Acquisition Programs

Cooperative research, development, and acquisition (RD&A) refers to a range of international programs in which DoD and a foreign nation jointly manage efforts to satisfy a common need or requirement by sharing work, technology, costs, and resulting benefits through an IA. These programs range in scope from small bilateral S&T agreements to multi-billion dollar, multi-national programs such as the Joint Strike Fighter (JSF) program. Put simply, there are a number of types of agreements the U.S. and its partners use, and a variety of statutes that provide the legal basis for cooperating in defense acquisition.

International cooperative RD&A programs are referred to by a variety of names, including Defense Cooperation in Armaments (NATO terminology), armaments cooperation, or simply cooperative programs. Regardless of the name, these programs are defined by the fact that they all involve:

- research, development, test, evaluation or production;
- mutual and equitable sharing of effort, cost and risk; and
- sharing of the resulting information, equipment or other benefits.

Table 19-2 summarizes their characteristics.

Table 19-2

Cooperative RD&A Program Characteristics

ARE	ARE NOT
Shared Cost	Contracts
Shared Risk	FMS Buyer-Seller Relationships
Shared Benefits	One Way Transfers or Grants

Jointly Managed	Foreign Aid
Government-to-Government	Industry Only Relationships

Legal Authority

The legal basis for International Cooperative Research, Development, and Acquisition (RD&A) programs comes from several sources in the United States law. The most significant are Sections 27 and 65, *Arms Export Control Act (AECA);* and 10 U.S.C. 2350a, 2350l, and 2358. These are briefly described in the following paragraphs. For program-specific assistance and guidance, proponents should consult their respective Office of General Counsel (OGC).

Section 27, AECA

Section 27, AECA, authorizes the President, delegated to the Under Secretary of Defense (Acquisition, Technology & Logistics), to enter into cooperative projects with NATO, NATO allies, NATO organizations or other friendly foreign countries. This legal authority provides for the U.S. and at least one other participant:

- To share the cost of research and development, testing, evaluation, and joint production, to including follow-on support;
- For concurrent production in the U.S. or another member country of a jointly developed defense article; or
- For procurement by the U.S. of defense articles from other eligible participants in direct support of the cooperative program.

Section 27 specifically describes the requirement for equitable cost sharing. Each agreement for a cooperative project shall provide that the United States and each participant will contribute to the cooperative project its equitable share of the full cost of such cooperative projects and will receive an equitable share of the results of such cooperative projects.

Additionally, a 30-calendar day congressional notification period prior to signature is required for all IAs that use Section 27 as a legal basis. Congress need not be in session during the notification period. If a member of Congress or a congressional staff member expresses concerns about the agreement within this 30 day period, the signing of the agreement must be delayed until the issue is resolved or the agreement proponent receives authorization from the Under Secretary of Defense [USD(AT&L)] to proceed.

Section 65, AECA

Under Section 65, AECA, DoD components may conclude and implement written agreements to make, accept, and administer loans, without charge, of U.S.defense materials, supplies, or equipment to, and to accept loans or gifts of defense materials, supplies, or equipment from a NATO or major non-NATO ally. These agreements permit no-cost loans of equipment for the purposes of cooperative research, development, test or evaluation programs. Each loan or gift transaction must be provided for under the terms of an IA that includes, but are not limited to the

purpose and objective(s) of the loan; articles to be loaned; loan duration; management responsibilities; and financial arrangements. The implications of expending or consuming a loaned item are addressed in the DoD 7000-14R, *Defense Financial Management Regulation (FMR),* and may be authorized by the Secretary of Defense under Section 65.

10 U.S.C.

Title 10 of U.S.C. contains a number of authorities that authorize international cooperative activities for the conduct of joint research, development, test and evaluation. The most commonly used authorities are 10 U.S.C. 2350a, 2350l, and 2358.

Section 2350a

10 U.S.C. 2350a provides DoD the authority to conduct cooperative R&D with NATO, NATO Organizations, member nations of NATO, major non-NATO allies and friendly foreign countries. All programs utilizing NATO Cooperative R&D funds rely on this legal authority.

Although 10 U.S.C. 2350a and Section 27, AECA, are similar in many respects, some key differences do exist, including the following:

- Section 2350a is limited to R&D. Section 27, AECA, also allows for cooperative and concurrent production efforts.
- Section 2350a designation extends to eight nations not designated as friendly foreign countries under Section 27, AECA, to include Bahrain, Jordan, Morocco, New Zealand, Pakistan, the Philippines, Taiwan, and Thailand. However, these nations are designated as major non-NATO allies under Section 65, AECA, thus authorizing loans, but not cooperative production.
- Section 27 allows the U.S. to mix and consolidate the participating governments' funding so that the pilot nation can contract on behalf of the other(s). Section 2350a does not allow this.
- Section 2350a efforts have no Congressional notification requirement prior to signing the agreement unless friendly foreign countries are involved. USD(AT&L) approval is still required.

Section 2350l

10 U.S.C. 2350l was an amendment enacted in December 2001 concerning reciprocal use of test facilities. Years of experience with Canada under the Canada-U.S. Test and Evaluation Program (CANUSTEP) MOU pinpointed areas where clarification of the legal basis was needed. The U.S. sought and obtained a specific Test and Evaluation Program (TEP) amendment to the R&D legal authority, 10 U.S.C. 2350l. This new legal authority authorizes the Secretary of Defense, with concurrence of the Secretary of State, to enter into an MOU or other formal agreement for the reciprocal testing of defense equipment. Section 2350l further defines the payment of costs associated with the reciprocal testing. This new

authority served as the legal basis for the renewal/ replacement of the CANUSTEP MOU in 2001, and for other bilateral TEP MOUs with France and Australia.

Section 2358

10 U.S.C. 2358 confers authority on the Secretary of Defense and the secretaries of the military departments to conduct and participate in R&D programs and to use foreign sources as appropriate. Section 2358 is often referred to as general R&D authority. This authority may be cited for cooperative R&D programs that do not involve coproduction, and where the participants perform, or separately contract to perform, their own share of the work. The greatest benefit of Section 2358 is that it can be used for limited cooperative RD&A activities with nations that are not members of NATO, or have been designated as major non-NATO allies or friendly foreign countries.

Cooperative Research and Development Mechanisms

DoD negotiates and concludes various types of acquisition-related International agreements (IAs) with foreign nations. The first type, cooperative RD&A memoranda of understanding or agreement, require case-by-case OSD-level approval, but provides the proponent with great latitude to pursue joint activities. RDT&E Project Arrangements/Agreements/Annexes (PAs), The Technical Cooperation Program (TTCP) PAs; Section 65, AECA, Loan Agreements; and U.S./Canada Defense Development Sharing Program (DDSP) PAs, on the other hand, are simpler, more focused types of RD&A IAs. Authority to negotiate and conclude these latter IA types is delegated to the MILDEP secretaries, or their designees, so these agreements can be developed and concluded more rapidly.

International Agreements - Cooperative Research, Development, and Acquisition

A Cooperative Research, Development, and Acquisition International Agreement (RD&A IA) is normally pursued when one or more prospective foreign participants desire to form a partnership with the U.S. Government in one or more of the following areas:

- Share the cost and effort of research, development, test and evaluation of a defense article; or
- Share the cost of investment and establishing a joint framework for cooperative production of a defense article.

The advantage of using cooperative RD&A IA vice a Project Arrangement/Agreement/Annex (PA) is that the scope of work permitted under such an agreement is very flexible and broad. The potential disadvantage lies in the complexity of the cooperative RD&A type of IA. There is a more stringent and detailed requirement for coordination at the outset of the effort, and review of the proposed IAs can be lengthy. In general, for the sake of efficiency and timeliness, proponents should look carefully at whether the objective of a proposed R&D effort can be accomplished through a PA.

Project Agreements - Research, Development, Test and Evaluation

International Research, Development, Test, and Evaluation Project Agreements (RDT&E PAs) are intended to facilitate the establishment of collaborative efforts involving basic, exploratory, and advanced technologies. The RDT&E umbrella agreement sets forth the general terms, conditions and formats for implementing individual projects related to technology base R&D activities. DoD has granted most DoD components authority to initiate negotiations for specific projects, which reduces administrative lead time.

Each RDT&E PA contains specific provisions describing the objective(s), scope of work, management structure, and financial arrangements for a particular project. System development and demonstration or production programs that may evolve from collaboration under one or more supplements to an umbrella agreement require separate cooperative agreements outside the scope of a RDT&E PA.

RDT&E agreements function like an IEP agreements; however, RDT&E agreements efforts are not limited to only information exchange. The umbrella agreement contains the standard sections, e.g., security, intellectual property rights, etc., and specifies the criteria that projects must meet. Specific PAs need only to address project specific information. Table 19-3 compares the content of an umbrella agreement to the content of an individual project agreement.

Table 19-3

Comparison of RDT&E Umbrella Agreement and Individual Project Agreement (PA)

Umbrella Agreement Content	Individual PA Content
Umbrella Objectives	Project Objectives
Umbrella Scope	Project Scope
Umbrella Management	Project Management
Intellectual Property Provisions	Project Cost Sharing
Security Provisions	Project Work Sharing
Loans of Materials	Contracting Arrangements
Third Party Sales and Transfers	
Liability	
Customs	

Amendments &Dispute Settlement	
Duration and Termination	

Currently, bilateral RDT&E IAs exist with Australia, Canada, France, Germany, Israel, The Netherlands, Norway, Singapore, South Korea, Sweden, and the United Kingdom. New Zealand would be included under the TTCP. In addition, a trilateral RDT&E IA exists between the U.S., Canada and the UK. It must be noted that if funding is exchanged, the PA must have specific provisions and the legal authority normally will be Section 27, AECA. When Section 27 authority is used, a 30-calendar day congressional notification period is required for PAs.

The Technical Cooperation Program Project Agreements

The Technical Cooperation Program (TTCP) is an international organization that collaborates in defense scientific and technical information exchange; program harmonization and alignment; and shared research activities for the five nations (Australia, Canada, New Zealand, the United Kingdom, and the United States).

Participation in TTCP is coordinated through regular meetings of national members of the Subordinate Elements at which areas of potential collaboration and program alignment are identified. In addition, symposia are conducted which, if appropriate and agreed by all TTCP participants, may be opened to a wider participation than TTCP members.

Two or more TTCP participants can enter into TTCP PAs. Like RDT&E PAs, TTCP PAs include specific provisions concerning objectives, scope of work, sharing of work, management structure.

Section 65, AECA, Loan Agreements

Under Section 65, AECA, MILDEPs may conclude and implement written agreements to make, accept, and administer loans, without charge, of U.S. defense materials, supplies, or equipment to, and to accept loans or gifts of defense materials, supplies, or equipment from NATO and major non-NATO allies. These agreements permit no-cost loan of equipment for the purposes of cooperative research, development, test or evaluation programs.

Each loan or gift transaction must be provided for under the terms of an IA that specifies, among other things, the purpose and objective(s) of the loan, articles to be loaned, loan duration, management responsibilities, return of the loaned item if applicable and financial arrangements. A test report is provided at no-cost to the providing party in exchange for the temporary loan or gift of a defense article.

No Section 65 Agreement may require a party to the agreement to provide materiel that would impair its own priorities, requirements, or commitments, or would otherwise be inconsistent with its national laws or regulations, or other international agreements. If an article is loaned to a foreign government, the loan should involve no funded cost to the U.S., and a cost-benefit analysis that compares the value of the loaned article to the value of the test report must be performed to justify the loan.

U.S.-Canada Defense Development Sharing Program and the Defense Production Sharing Program

The U.S.-Canada Defense Development Sharing Program (DDSP) and the Defense Production Sharing Program (DPSP) were established in 1963 to facilitate cooperation in military R&D between the U.S. and Canada. The objective of both programs is to promote joint U.S.-Canadian military materiel programs and to make more efficient use of industrial, scientific, and technical resources of both countries in the interest of mutual defense.

Under DDSP, the Canadian government agrees to fund up to 50 percent of the development cost if one or more Canadian defense firm is awarded a contract for development of a U.S. weapon system or related equipment. PAs delineate the specific nature of the DDSP/DPSP projects to be undertaken. PAs include provisions for defining the project, funding, contracting, security, information transfer, personnel access, liability, and any other project specific matters. The authority to enter into such PAs has been delegated to the Military Departments.

Coalition Warfare Initiative

The Coalition Warfare (CW) Initiative is a Defense-wide development program started in FY2001 and administered by the USD(AT&L)/DIR(IC) to provide seed money for cooperative research and development programs which will improve the interoperability between U.S. forces and those of likely U.S. coalition partners. Recent coalition operations have shown a lack of partner coordination specifically in logistics, intelligence, surveillance, reconnaissance, command, control, and communications. These shortcomings impede the U.S. warfighters' ability to efficiently and safely complete missions and coalition campaigns. Moreover, there is a growing capabilities gap between the U.S. and its allies. Because the U.S. is not likely to fight without partners in the foreseeable future, DoD must address coalition interoperability in parallel with joint interoperability.

The CW Initiative provides the ability to initiate projects in prioritized capability areas. As a program, CW is designed to improve international cooperation and interoperability and, where applicable, to reduce isolated national and MILDEP efforts early in development programs that are expected to lead to fielded systems. Based upon input from the warfighting community, CW identifies key U.S. and allied programs as candidates for enhanced coalition interoperability. CW funds are applied to short-term cooperative interoperability efforts (two years or less for CW funds).

International Cooperative Research and Development Nunn Program

The International or NATO Cooperative R&D Program is often referred to as the Nunn Program, since former Senator Sam Nunn (D, GA) was the primary sponsor of the original legislation. It is no longer limited to NATO nations only. Funding for the program is provided through annual authorization and appropriations legislation directly to the military departments.

The International or NATO Cooperative R&D Program is an important element of the defense acquisition process of DoD. While many other sources of funds are used to

pursue cooperative R&D efforts, this program provides seed money to capitalize on cooperative opportunities until the military departments can program their own funds throughout the normal budgeting process. The program has resulted in a substantial number of international cooperative R&D programs with high payoff; to include the Army's Ducted Rocket Engine effort, the Navy's AV-8B Harrier II Plus radar integration, and the Air Force's F-16 Midlife Update. Use of International Cooperative R&D funding has certain restrictions including:

- There are certain restrictions on the use of International Cooperative R&D funding.
- There must be an IA defining the nature of the project.
- International Cooperative R&D funds must be spent in the U.S.
- Each Project must be jointly managed
- Allies must contribute an equitable amount of funds in comparison to total U.S. funding.

Defense Trade

International sales, purchases, and licensed coproduction are common forms of international defense cooperation. These transactions are important in that they contribute to interoperability and promote cost savings. These transactions are heavily regulated by most nations and are often politically sensitive because they involve both national security and public funding.

Although most DoD equipment is from domestic sources, DoD makes use of a worldwide supplier base. DoD is somewhat constrained by laws and regulations that discriminate against acquisition of non-U.S. products, such as the *Buy American Act* requiring 50 percent U.S. content, the Berry Amendment affecting procurement of food, clothing, specialty metals, or hand measuring tools, and annual DoD appropriations act provisions that restrict certain procurements to U.S. sources.

To overcome some of these limitations, the DoD has agreements with many allies to facilitate defense trade. The aim of those agreements is rationalization of the defense equipment supplier base so as to achieve the greatest efficiency in equipping our collective forces. The agreements establish reciprocity in the treatment of each other's vendors and enable the Secretary of Defense to waive the discriminatory provisions of the *Buy American Act*.

Foreign-developed products acquired by the DoD are often produced in the U.S. under license. Examples of such products are the Rhinemetall 120mm tank gun used on the M1A1 Main Battle Tank, the Beretta 9mm pistol, the AV-8B Harrier aircraft, the Mark 92 naval fire control radar, the Oto Melara 76mm naval gun, the T-45 trainer, and the joint Navy/Air Force trainer (JPATS).

Legal Authority

The AECA provides DoD legal authority to transfer defense articles and services to foreign governments. It also regulates direct commercial transfers of defense

articles and services from U.S. defense contractors to foreign governments, including transfer of technical information required for the development, production or maintenance of defense equipment. Direct Commercial Sales (DCS) transfers are conducted under munitions export licenses issued by the Department of State, in consultation with DoD through the Defense Technology Security Administration (DTSA).

The *Security Assistance Management Manual (SAMM)* contains policy and procedures regarding all FMS activities, including FMS coproduction. The *International Traffic in Arms Regulations (ITAR)* establishes U.S. government policies and procedures that govern the munitions export license process.

Buy American Act

The *Buy American Act* discriminates against foreign suppliers by requiring U.S. Government purchasers to add a price differential to the price of foreign goods in competitive source selection actions. The Secretary of Defense is authorized to waive the provisions of the *Buy American Act* on the basis of reciprocity, which also provides U.S. vendors better access to foreign markets, and has entered into reciprocity agreements with many allied and friendly foreign nations. These IAs, called Defense Reciprocal Procurement Agreements, promote both operational interoperability and cost savings.

Nine reciprocal procurement IAs are currently in force with industrialized NATO partners. These IAs define general and reciprocal policies affecting R&D, production, procurement, and logistics support of defense equipment. Other IAs have been established with less-industrialized NATO partners, defining general and reciprocal terms for defense industrial cooperation, or with other foreign participants covering terms for defense procurement or for defense industrial cooperation, depending on the foreign participant.

The objective of these agreements is to foster overall defense cooperation while ensuring reciprocity for U.S. industry seeking business opportunities in foreign defense markets, just as foreign industries are allowed to pursue opportunities in the U.S. defense market. Allied and friendly countries with which the U.S. has signed a reciprocal or general defense procurement IA or a defense industrial cooperation agreement are identified as qualifying countries in the *Defense Federal Acquisition Regulation Supplement (DFARS).*

The IAs with these countries provide for waiver of domestic price preference of the *Buy American Act* so long as the partner country reciprocally waives its similar buy national legislation for procurements from U.S. sources. The *Buy American Act* and the DoD Balance of Payments Program, restricting construction materials to U.S. sources, are waived for all qualifying countries.

The involvement of Canadian sources in the U.S. procurement process takes place under the Defense Development Sharing Program (DDSP) and Defense Production Sharing Program (DPSP). Under these agreements, the U.S. provides preferential access to Canadian suppliers to support the North American industrial base, and Canada relies on the U.S. for most of its major weapon systems. For production

planning purposes, Canada is part of the defense industrial base under the *Defense Federal Acquisition Regulations Supplement (DFARS)*, Subpart 225.870, *Contracting with Canadian Contractors*.

Procurements can be restricted domestic sources for national defense reasons, national disclosure policy, defense mobilization requirements, other U.S. laws or regulations, or industrial security requirements.

Foreign Production of U.S. Defense Articles

Often, foreign governments seek to produce domestically part or all of the U.S.-developed defense equipment to satisfy domestic defense industry development or to establish a domestic maintenance capability. Generally speaking, U.S. defense companies accommodate such foreign production and provide commercial licenses to the foreign governments or foreign firms. Such commercial licenses also require U.S. government approval through the State Department export licensing process. In some cases, the DoD transfers through FMS technical data packages that relate to such licensed coproduction programs. There are three distinct methods of authorizing foreign production of defense articles.

Cooperative Production

Cooperative production is conducted with a partner nation under a cooperative IA, and features a division of labor. Each partner produces parts of a system and acquires other parts from partners. Final assembly can be conducted by one or more of the partners. Most cooperative production programs naturally evolve from System Development and Demonstration phase partnerships, e.g. the Rolling Airframe Missile (RAM) program with Germany and the Multi- Functional Information Distribution System with France, Germany, Italy, and Spain.

FMS Coproduction

FMS coproduction involves the use of FMS procedures and commercial licenses to transfer to a foreign nation the ability to produce U.S.-origin defense articles developed and fielded by DoD. Coproduction capabilities may be transferred solely through FMS Letters of Offer and Acceptance (LOAs), may involve a combination of FMS LOAs and associated munitions export licenses, or may even require development of an FMS Coproduction IA. FMS coproduction agreements are governed by the SAMM, Chapter 11.

Appropriate provisions will be included in the coproduction LOA or MOU relating to the return or flow back to the U.S. of any technical improvements to the equipment or manufacturing process transferred to the foreign purchaser. The U.S. government must have the right to use the improvements without the payment of any fees.

Licensed Coproduction

Licensed coproduction involves use of munitions export licenses issued by the Department of State, usually after consultation with DoD, to enable U.S. companies to transfer to foreign governments or foreign companies the ability to produce U.S. origin defense articles. It should be noted that the U.S.-origin defense articles

proposed for licensed coproduction may not even be in DoD use, or may be a significantly modified version of DoD equipment in either development or production. DTSA, in concert with the other DoD components, agencies, and the OSD staff, plays a leading role in formulating DoD's position with regard to U.S. industry-licensed coproduction proposals.

End-Use Certificates

For a number of years, the U.S. has required foreign purchasers of armaments and other equipment on the U.S. Munitions List (USML) to provide assurances against third party transfer and certain uses without the consent of the U.S. government. For FMS, these assurances are included in the terms and conditions of the LOA. Direct commercial sales (DCS) require an authorized representative of a foreign country to provide comparable assurances in the form of a separate End-Use Certificate (EUC).

Recently, several foreign countries have begun requiring the U.S. government to sign EUCs for defense products purchased by DoD from their countries. In a 9 April 1991 memorandum, the Deputy SECDEF established the following policy:

- Such EUCs will be signed at a level no lower than that of secretaries of the MILDEPs and directors of defense agencies.

- These EUCs will not be signed if they contain restrictions on worldwide use or transfer to allies engaged together with the U.S. in armed conflict with a common enemy.

Offsets

Offsets are a form of reciprocal trade provided by a U.S. contractor to a purchasing country. Offsets are separate commercial agreements that can be part of a cooperative program, FMS program or direct commercial defense sale. Offsets found within International Armaments Cooperative Programs are typically "direct offsets" that provide for the foreign government to co-produce the defense article or components being acquired. Based upon these offset agreements, foreign governments can obtain the technology and tooling necessary for the overseas manufacture all or part of the item(s) being purchased. An in-depth and detailed discussion of offsets can be found in the earlier Chapter 11, *FMS Acquisition Policy and Process*.

Cooperative Logistics

Cooperative logistics refers to cooperation between the U.S. and allied or friendly nations or international organizations in the logistical support of defense systems and equipment. Cooperative logistics is part of the acquisition process, but being also a substantial part of military operations, much of the implementation process involves Security Assistance processes and procedures.

Legal and Policy Basis

The *North Atlantic Treaty Organization Mutual Support Act of 1979,* 4 August 1980, [10 U.S.C. 2341-2350], now known as the *Acquisition and Cross Servicing*

Agreement (ACSA) Authority, provides two distinct, although not entirely separate, provisions for cooperative logistics support. 10 U.S.C. 2341 provides acquisition-only authority, and 10 U.S.C. 2342 provides cross-servicing authority, which includes both acquisition and transfer authority. The *Defense Authorization Act, Fiscal Year 1987* expanded this authority to include eligible, non-NATO countries; the *Defense Authorization Act, Fiscal Year 1991* removed geographic restrictions on logistics transfers, permitting transfers to allied nations in any geographic location. The *Defense Authorization Act, Fiscal Year 1995* added the United Nations Organization or any other regional international organization of which the U. S. is a member.

Acquisition-Only Authority

10 U.S.C. 2341 authorizes DoD to acquire logistic support, supplies, and services directly from NATO countries' governments, subsidiary NATO bodies, the United Nations Organization or any other regional international organization of which the U. S. is a member, and other eligible countries for U.S. forces deployed in the supporting country's military region, without a cross-servicing agreement or an implementing arrangement. It allows liquidation by either cash payment or replacement-in-kind or exchange of identical or substantially identical items. A non-NATO country must meet one or more of the following criteria:

- Have a defense alliance with the U.S.;
- Permit stationing of members of the U.S. armed forces or the home porting of naval vessels of the U.S.;
- Agreed to preposition U.S. materiel;
- Serve as host country for U.S. armed forces during exercise, or
- Permit other U.S. military operations in-country.

Cross-Servicing Authority

10 U.S.C. 2342 authorizes DoD, after consultation with the Department of State, to provide logistics support, supplies, and services to a NATO nation, a NATO subsidiary body, the United Nations Organization or any other regional international organization of which the U. S. is a member in return for reciprocal provisions of logistics support, supplies and services. SECDEF may designate non-NATO nations as eligible to participate in cross-serving agreements after:

- Determining such action is in the interest of U.S. national security;
- Consultation with the State Department; and
- Expiration of a 30-day waiting period after notifying Congress.

SECDEF may not use this authority to procure from any foreign government or international organization any goods or services reasonably available from domestic commercial sources. There are additional, specific restrictions on the items that may be transferred.

Cooperative Logistics Support Agreements

DoDD 2010.9, *Acquisition and Cross-Servicing Agreements*, provides complete details on responsibilities and procedures for acquiring and transferring logistics support, supplies, and services under the authority of Title 10 U.S.C.

Acquisition and Cross Servicing Agreements

Acquisition and Cross Servicing Agreements provisions, collectively referred to as ACSAs, are applicable worldwide, not merely to NATO nations. As of October 2003, the U. S. has ACSAs with 76 countries, including most NATO nations, as well as the NATO Maintenance and Supply Agency (NAMSA), NATO Allied Command Transformation, and SHAPE. There are currently seven ACSAs awaiting final signature by the country and the appropriate combatant commander. Seventy four additional countries are eligible to negotiate an ACSA.

Such logistics support transfers come into play primarily during wartime, combined exercises, training, deployments, contingency operations, humanitarian or foreign disaster relief operations, certain peace operations under the UN Charter, or for unforeseen or exigent circumstances. As a result, ACSA authority is almost always exercised by the combatant commander.

There must usually be a cross-servicing agreement and implementing arrangements, negotiated in accordance with authority delegated by DoDD 2010.9, to implement proposed transfers. Whenever practical, a single cross-servicing agreement with the eligible nation or NATO body should form the basis for both acquisitions and transfers. Until such an agreement has been signed, logistics support, supplies, and services may be acquired from the nation or NATO entity, but not transferred to it.

Compensation for acquisitions or transfers under these arrangements may be either on a cost reimbursement basis or by exchange of supplies or services of equal value. These agreements establish principles and provisions for effecting required support, but do not bind either party to any particular monetary value or number of transactions. DoD organizations using ACSA authority to acquire or transfer logistic support, supplies, or services must document each transaction.

ACSAs must primarily benefit the interest of DoD forward deployed commands and forces; they are not a grant program. Acquisitions or transfers must be either in cash, replacement-in-kind, or exchange of supplies or services of equal value in support of the operational needs of forward deployed forces. They may not be used to increase inventories, nor can DoD use them when the desired materiel or service is reasonably available from U.S. commercial sources. Most importantly, DoD acquisition personnel must ensure ACSAs are not used as a routine source of supply for a foreign country. Routine foreign requests for desired U.S. defense articles and services should be addressed through FMS procedures in accordance with the SAMM.

Categories of logistics support, supplies, and services that can be provided as defined in 10 U.S.C 2350 include: food; billeting; transportation, including airlift; petroleum, oils, and lubricants; clothing; communications services; medical services;

ammunition; base operations support; storage services; use of facilities; training services; spare parts and components; repair and maintenance services; calibration services; and port services.

In addition to the above categories, logistic support, supplies and services includes temporary use of general purpose vehicles and other nonlethal items of military equipment which are not designated as significant military equipment on the U.S. Munitions List. There are many items that may not be transferred under an ACSA, such as weapon systems and major end items of equipment. A complete listing is provided in DoDD 2010.9.

Host Nation Support

Host Nation Support (HNS) is civil and military assistance, to include materiel, manpower, or services, rendered in peace or war by a host nation to allied or friendly forces and organizations located on or in transit through its territory. HNS agreements are normally pursued by combatant commands under overall direction of JCS and Dir (IC). HNS assistance is provided in accordance with commitments made under alliances or bilateral or multilateral agreements, usually in the context of a broader cooperative logistics program.

Areas normally addressed in HNS agreements and implementing arrangements include, but are not limited to: logistics lines of communication; terminal transfer services; collocated operating bases; supplies; en route and transient support; troop support services; overflight rights; facilities; weapons systems cross-servicing; materiel handling; port reception, departure, and clearance services; equipment decontamination services; naval vessels' support; medical services and equipment; intra-theater transportation; labor; and communication services and equipment.

Cooperative Military Airlift Agreements

10 U.S.C. 2350c authorizes the Secretary of Defense, after consultation with the Department of State, to enter into cooperative military airlift agreements with allied countries. These agreements cover transporting NATO and other allied nations' military personnel and cargo on aircraft operated by or for the U.S. armed forces, in return for reciprocal transportation of U.S. military personnel and cargo. The Secretary of Defense may also enter into non-reciprocal agreements with NATO subsidiary bodies for transportation of their personnel and cargoes on U.S. armed forces aircraft.

War Reserve Stocks for Allies

The *Foreign Assistance Act (FAA)* of 1961 established the War Reserve Stocks for Allies (WRSA) program, which allows the prepositioning of host-nation intended, but U.S.-owned, war reserve material in authorized countries during peacetime. U.S. policy requires allies provide for their own sustainability to the maximum extent possible; any action to supplement established allied war reserve requirements will be considered only on a case-by-case basis. The host nation through a bilateral agreement will normally fund storage, maintenance, in-country transit, and other WRSA-related costs.

Congress limits the value of assets transferred into WRSA stockpiles located in foreign countries in any fiscal year through authorizing legislation. The U.S. retains title to the stocks; title must be transferred before the foreign country may use them.

Acceptance and Use of Real Property

10 U.S.C. 2350g authorizes DoD Components to accept real property, services, and supplies from a foreign country for support of any element of the U.S. armed forces in an area of that country. This includes:

- Real property or the use of real property and related services and supplies for the U.S. or for use by the U.S. in accordance with a mutual defense agreement or an occupational arrangement; and
- Services furnished as reciprocal international courtesies or as services customarily made available without charge.

Specific authorization is not required unless acceptance would violate a prohibition or limitation that applies to the program, project, or activity in question. A report must be submitted to Congress within 30 days after the end of each quarter in which real property, services, and supplies are accepted.

Fora for International Armaments Cooperative Programs

There are various fora which exist among the U.S. and its friends and allies which serve to promote, plan, or support armaments cooperation. The U.S. participates in a variety of multinational organizations also maintains a series of bilateral arrangements, some under the umbrella of established programs and others as unique arrangements.

DoD acquisition personnel involved in armaments cooperation activities may require familiarity with efforts of one or more of the forums described below in order to obtain assistance in the promotion or implementation of a desired international cooperation initiative.

NATO Conference Of National Armaments Directors (CNAD)

NATO has been the centerpiece of all U.S. defense cooperation since the end of World War II, including cooperative RD&A projects. Cooperation in weapons development and acquisition is the responsibility of the CNAD, which is made up of the senior person of each nation responsible for weapons procurement, the National Armament Director (NAD), and meets regularly to consider political, economic and technical aspects of NATO forces' equipment development and procurement.

The CNAD established key committees to concentrate on specific functional areas. These committees, called CNAD Main Armaments Groups, are responsible for research, armaments and equipment programs. Other groups under the Conference, called CNAD Partnership Groups are active in defense procurement policy and acquisition practices, codification, quality assurance, test and safety

criteria for ammunition and material standardization. Additionally, the CNAD steers ad hoc groups that are responsible for special armaments projects.

Five Power National Armaments Director Meetings

In the 1970s, the Four Power was established as an ad hoc group to develop a consensus on issues to be considered by the CNAD. In 2000, Italy joined the forum, making it the renamed Five Power NAD and consisting of the NADs from France, Germany, Italy, the United Kingdom, and the United States. In addition to CNAD issues, the Five Power NADs discuss cooperative projects and issues involving the Five Power countries. The Five Power NADs meet semiannually, just before the full CNAD meeting. Each country acts in turn as the hosting country.

Senior NATO Logisticians Conference

The Senior NATO Logisticians Conference (SNLC) is the senior NATO advisory body on consumer logistics. Its mission is to assess NATO's logistics posture to ensure NATO forces adequate logistics support. The Conference has adopted provisions intended to permit NATO to provide logistical support to smaller and more mobile forces consisting of multi-national components.

NATO Maintenance and Supply Organization

The main purpose for the NATO Maintenance and Supply Organization (NAMSO) is to provide the structure for the logistics support of selected weapons systems in the national inventories of two or more NATO nations. This is achieved through the common procurement and supply of spare parts and the provision of maintenance and repair facilities.

NATO Maintenance and Supply Agency

The executive arm of NAMSO is the NATO Maintenance and Supply Agency (NAMSA). Besides providing the full range of logistics support services of weapon and equipment systems held in common by NATO nations, it promotes materiel readiness and improved logistics efficiently. NAMSA enters into cooperative procurements for participating countries, as well as providing storage, calibration, and maintenance services and depot and supply services for weapons systems common to two or more alliance members.

NATO Standardization Organization

The NATO Standardization Organization (NSO) is comprised of the NATO Committee for Standardization (NCS), the NATO Standardization Staff Group, and the NATO Standardization Agency. The role of the NSO is to advance interoperability and to contribute to the ability of Alliance forces to train, exercise and operative effectively together.

NATO Committee for Standardization

NATO Committee for Standardization (NCS) is the senior NATO authority on overall standardization matters, and thereby aims to enhance NATO standardization policies.

NATO Standardization Staff Group

The NATO Standardization Staff Group (NSSG) reports to the NCS on issues that aim to harmonize standardization policies and procedures, as well as coordination of standardization activities.

NATO Standardization Agency

NATO Standardization Agency (NSA) is responsible to the NATO Standardization Committee for the coordination of issues between all fields of standardization. It sets out procedures, planning and execution functions related to standardization for application throughout the Alliance.

NATO Communications and Information Systems

The NATO Consultation, Command and Control Organization (NC3O) is responsible for a provision of a cost-effective interoperable and secure capability NATO-wide to ensure high level political consultation and command and control of military forces. The NC3 Agency (NC3A) performs the central planning, systems integration, design, systems engineering and technical support for NATO C3 systems and installations. It also provides scientific and technical advice to the Major NATO Commanders and other NATO customers. NC3A has facilities in The Hague and in Brussels.

NATO Research and Technology Organization

The NATO Research and Technology Organization (RTO) is the single focus in NATO for defense research and technology activities. Its mission is to conduct and promote cooperative research and information exchange. The objective is to support the development of the Alliance, to maintain a technological lead and to provide advice to NATO and national decision-makers. The RTO has a dedicated staff headquartered in Neuilly, France.

Australia, Canada, New Zealand, United Kingdom and United States Fora

Australia, Canada, New Zealand, United Kingdom, and the U.S. have a variety of programs dedicated to standardization and technical cooperation. The objectives are to facilitate standardization of equipment and procedures among their respective member militaries and to develop common or compatible doctrine, logistics procedures, and systems among the participating countries.

American, British, Canadian, and Australian Armies Standardization Program

The American, British, Canadian, and Australian (ABCA) program seeks to optimize interoperability, focusing on the continuum of military operations including prevention, intervention, enforcement, stabilization, regeneration, sustainment, and

transition against conventional and unconventional forces in multiple and varied geographic regions and environments. An ABCA standard is a record of agreement among ABCA armies to adopt like or similar equipment, ammunition, supplies and stores, and/or operational, testing, logistical, and administrative procedures.

Air Standardization Coordination Committee

Development of air standardization policy among the five nations is accomplished through the ten Air Standardization Coordination Committee (ASCC) specialist working parties who generate formal agreements, known as ASCC Air Standards. Both the U. S. Air Force and U. S. Navy participate in the ASCC. The ASCC allows member nations to reduce R&D costs and enhance standardization through the exchange of equipment.

Naval C4 Organization

The Australian, Canadian, New Zealand, United Kingdom, and U.S. (AUSCANNKUKUS) navies provides a forum for the exchange of information on naval interoperability and to resolve long term complex C4 interoperability issues. The primary working element is the AUSCANNZUKUS C4 Committee which meets twice a year to address technical and operational interoperability issues. Technical support is provided by technical working groups.

Combined Communications—Electronics Board

The Combined Communications – Electronics Board (CCEB) is responsible for coordination of military communications and electronics matters among the five nations. It accomplishes most of its work through two international subject matter experts groups who consider long-term issues that require continual maintenance. The CCEB issues a variety of technical publications providing guidance for communications and electronics policies and procedures among the member nations.

The Technical Cooperation Program (TTCP)

The Technical Cooperation Program (TTCP) is an international organization that collaborates in defense scientific and technical information exchange; program harmonization and alignment; and shared research activities for the five nations (Australia, Canada, New Zealand, the United Kingdom, and the United States). Participation in TTCP is coordinated through regular meetings of national members of the Subordinate Elements at which areas of potential collaboration and program alignment are identified. In addition, symposia are conducted which, if appropriate and agreed by all TTCP participants, may be opened to a wider participation than TTCP members.

Pacific Area Senior Officers Logistics Seminar (PASOLS)

PASOLS is an annual apolitical forum for the exchange of ideas, initiatives, information and experience in the logistics arena. It is the only multinational, multi-service, Ministry/Department of Defense level forum in the Pacific region. The seminar began in 1971, but has over time expanded in size and scope so that now

over 30 nations from the Asian-Pacific-Indian Ocean regions are invited to attend, and 25 are member nations. PASOLS has experienced considerable success against its goals of fostering logistics cooperation and logistics proficiency.

Members include Australia, Bangladesh, Brunei, Canada, Peoples' Republic of China, Fiji, India, Indonesia, Japan, Kiribati, Madagascar, Malaysia, Maldives, Mongolia, New Zealand, Papua New Guinea, Philippines, Singapore, Solomon Islands, South Korea, Sri Lanka, Thailand, Tonga, United States and Vanuatu.

The nations are regularly invited to attend as observers are Cambodia, Comoros, French Polynesia, Mauritius, Nepal, New Caledonia, Russia, Seychelles, and Samoa.

Von Karman Institute

The Von Karman Institute for Fluid Dynamics in Belgium is an educational organization and performs leading edge research in fluid dynamics. Personnel from member nations can also earn advanced degrees from the Institute. The U.S. is the executive agent for the Von Karman Institute. It is currently supported with subsidies from most of the member countries of NATO and with an income derived from contract research.

International Defense Educational Arrangement

The International Defense Educational Arrangement (IDEA) was formed in 1988 as an arrangement among the defense acquisition training and education institutions in the U.S., United Kingdom, and Germany. France joined in 1991. The participating institutions are:

- Defense Acquisition University, Fort Belvoir, U.S.
- Royal Military College of Science, Shrivenham, United Kingdom
- Federal Academy of Defence Administration and Technology, Mannheim, Germany
- Centre des Hautes Études de l'Armement, Paris, France

IDEA aims to improve the economy and effectiveness of international training and education for acquisition management through cooperation among national defense training and education institutions. IDEA is funded on a national basis. IDEA members meet annually during an international armaments cooperation seminar, the hosting of which rotates among the participating institutions. An annual product of IDEA is the documentation and update of the four participating nations' acquisition processes and related topics in a uniform format.

Bilateral International Forums

In addition to the above multi-national forums, the U.S. is party to many bilateral forums associated with international armaments cooperation. The U.S. has bilateral cooperation agreements with the countries of Argentina, Austria, Australia, Canada,

Czech Republic, Denmark, Egypt, Finland, France, Greece, Hungary, India, Israel, Italy, Japan, Lithuania, Netherlands, Norway, Poland, Portugal, Slovakia, Singapore, South Korea, South Africa, Spain, Sweden, Turkey, Ukraine and the United Kingdom.

Summary

This chapter has provided the reader with a brief introduction to some of the various forms of armaments cooperation which are normally called International Armaments Cooperation Programs (IACP). These programs generally differ from security assistance with respect to their legal authorities, scope, funding, and offices of primary responsibility. Nonetheless, IACP and security assistance often go hand-in-hand in the furtherance of U.S. defense policy. Therefore, it is necessary that U.S. personnel working in either area have a familiarity of both programs.

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